

FIGURE 1

5'-GAAACTGGACAGCACAGACTTCACCA(G)GCACCATCAAGCTGCTGAATGAAAAT
TCATATGTCCCTCGTGAG-3' (71 bp) [SEQ ID 1]
3'-CTTGACCTGTCGTCTGAAGTGGT(C)CGTGGTAGTCGACGACTTACTTTAA
GTATACAGGGAGCACTC-5' [SEQ ID 2]

5'-CCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCACAGACTTCACCA(G)GCA
CCATCAAGCTGCTGAA-3' (67 bp) [SEQ ID 3]
3'-GGACAACTCTTCAACAGCCTTTGACCTGTCGTCTGAAGTGGT(C)CGTG
GTAGTCGACGACTT-5' [SEQ ID 4]

5'-CCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCACAGACTTCACA(G)GCACCA
TCAAGCTGCTGAATG-3' (68 bp) [SEQ ID 5]
3'-GACAACTCTTCAACAGCCTTTGACCTGTCGTCTGAAGTGGT(C)CGTGGT
AGTCGACGACTTAC-5' [SEQ ID 6]

Figure 2

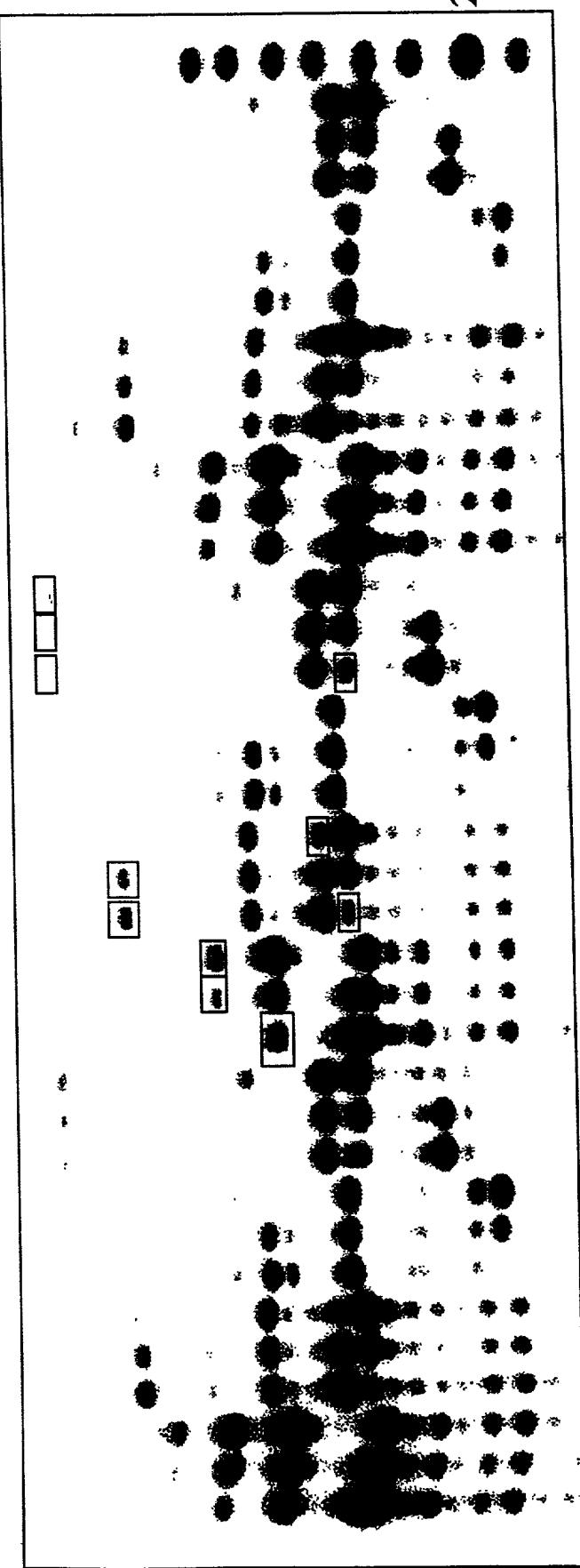
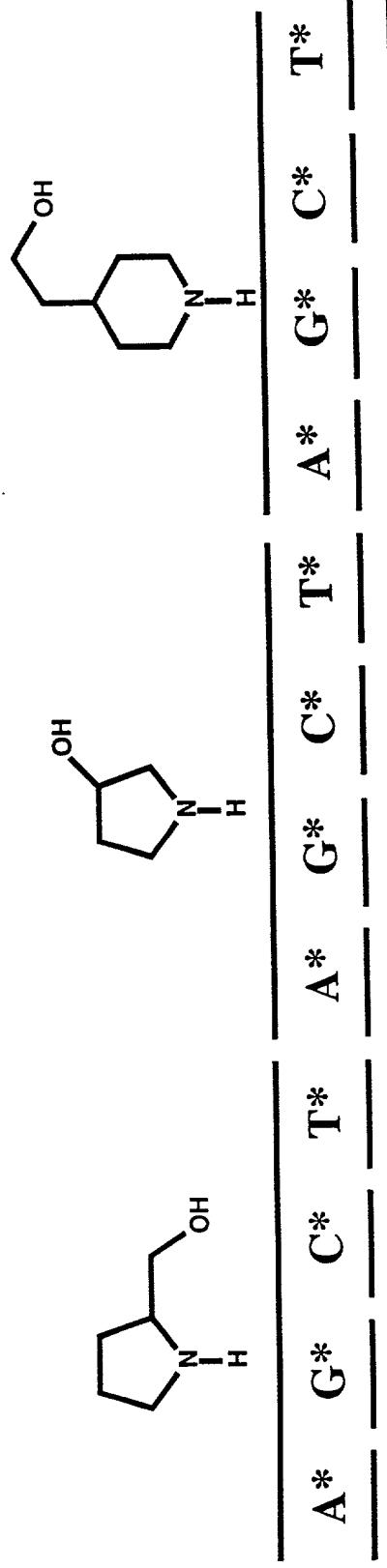
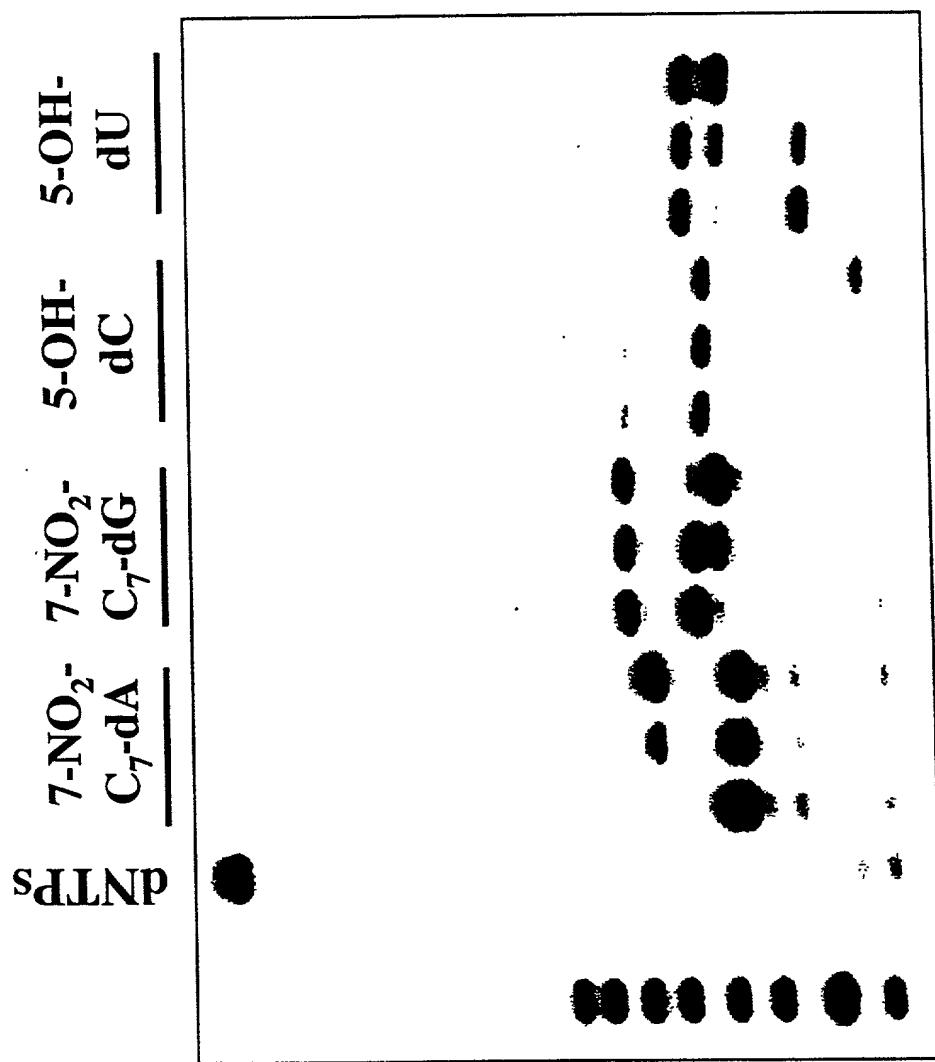
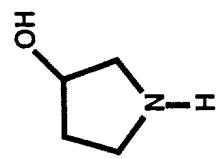


Figure 3

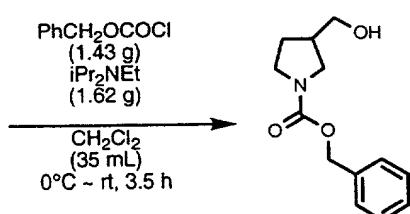
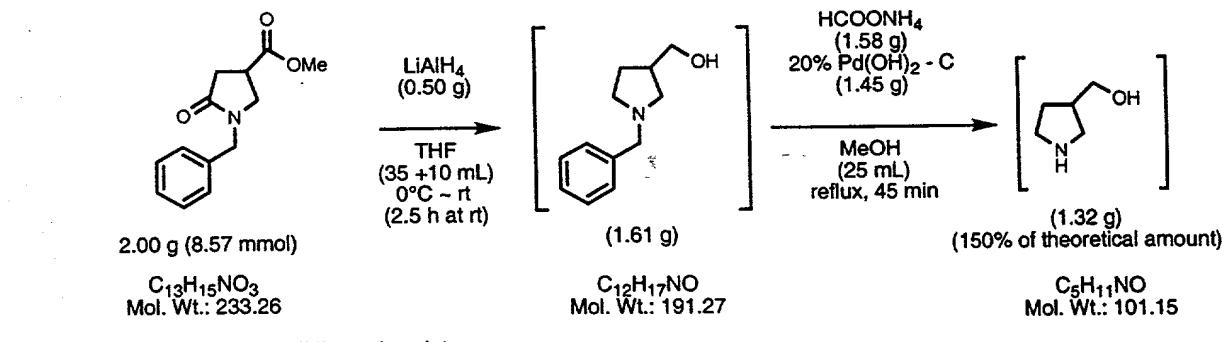
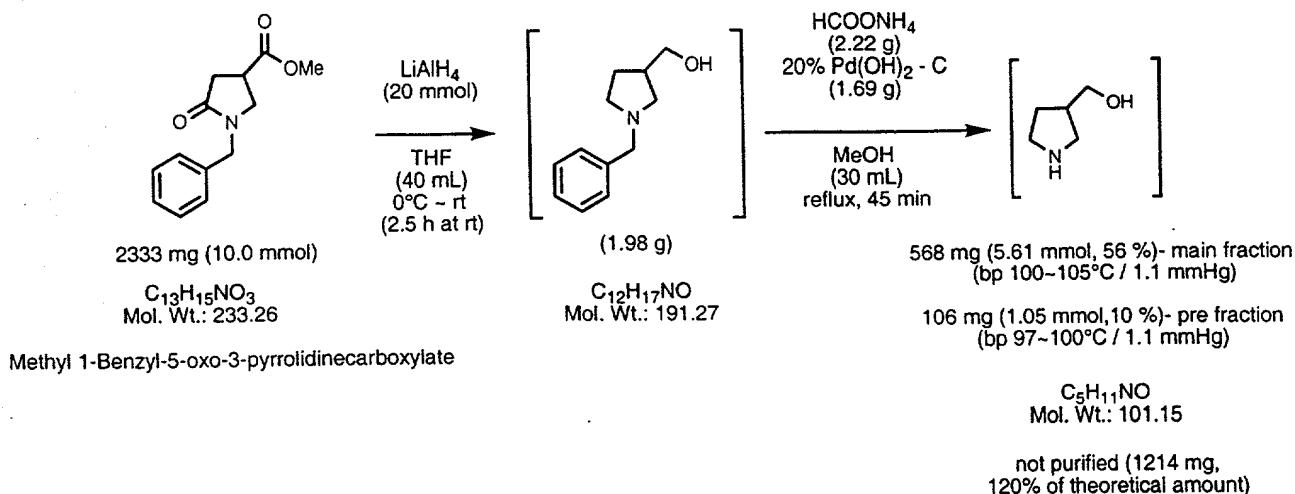


1.46 M



98 °C
1 hr

Figure 4



674 mg
(2.86 mmol)
33% yield in 3 steps
(one chromatographic purification)

[SiO₂ flash column (AcOEt: Hex = 1 :1 ~ 2: 1)]

C₁₃H₁₇NO₃
Mol. Wt.: 235.28

Figure 5

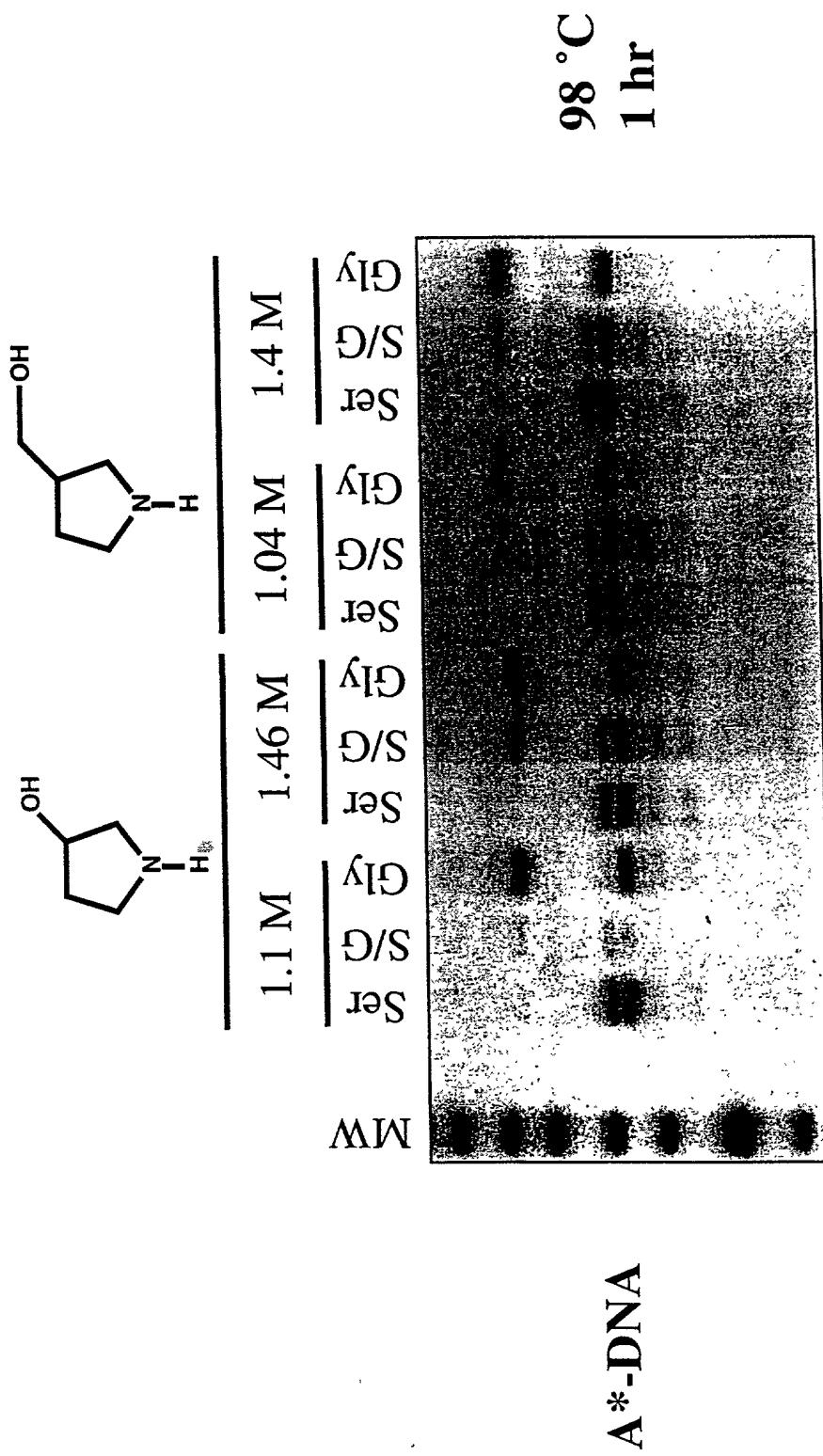
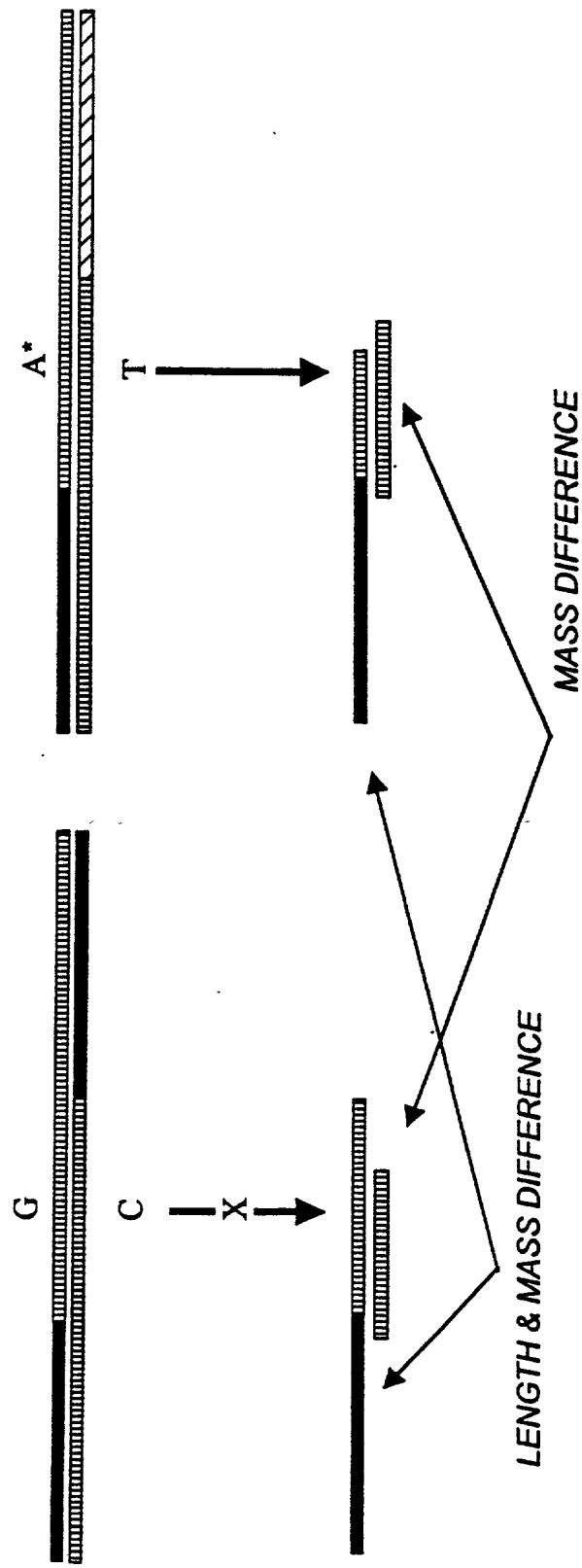
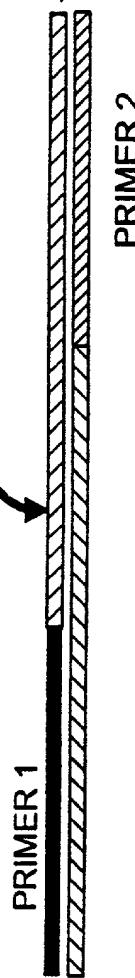


Fig. 6

POLYMORPHIC SITE, A OR G

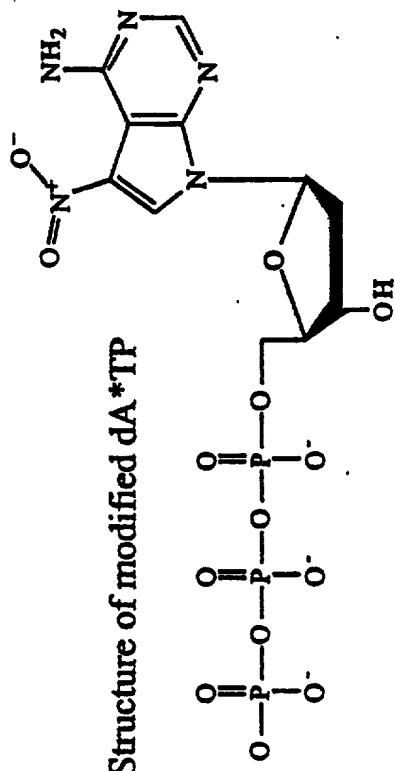


7(a)

Fig. 7

5'-GAACTGGACAGCACAGACTTCACCGAGCATTCAAGCTGCTGAATGAAATTCAATATGTCCTCGTGAGGCTGGATCTCAA-3' [see ref.]
3'-CTTTGACCTGTCGTGCTGAAGTGGTCTGTGAGTTACGACTTACAGTTAAGTATAACAG GGAGGCACTCCGACCTAGAGTT-5' [see ref.]

A
 T
vs.
 G
 C



Structure of modified dA*TP

AmpliTaq Gold	0.1 unit/ml
modified-dA*TP	0.2 mM
dCTP, dGTP, dTTP	0.2 mM

Fig. 7(b)

Fig. 8

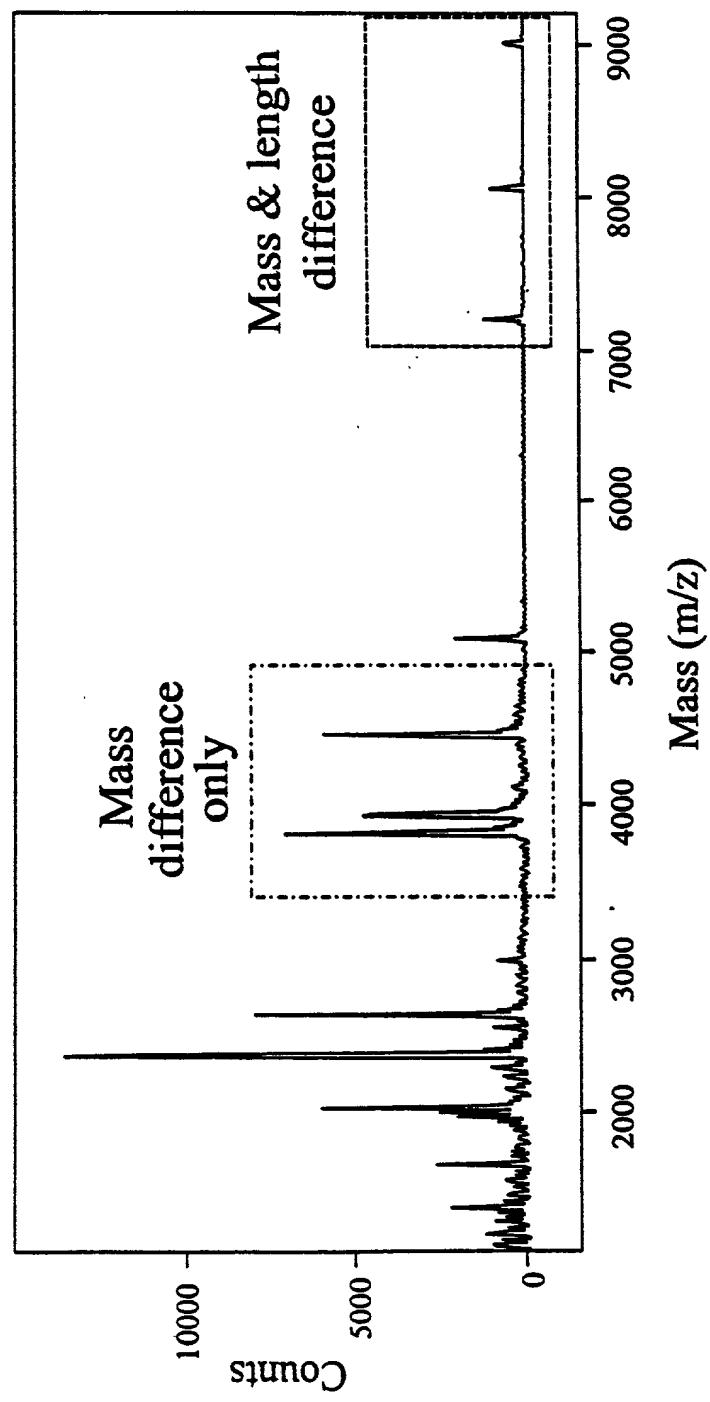


Fig. 9

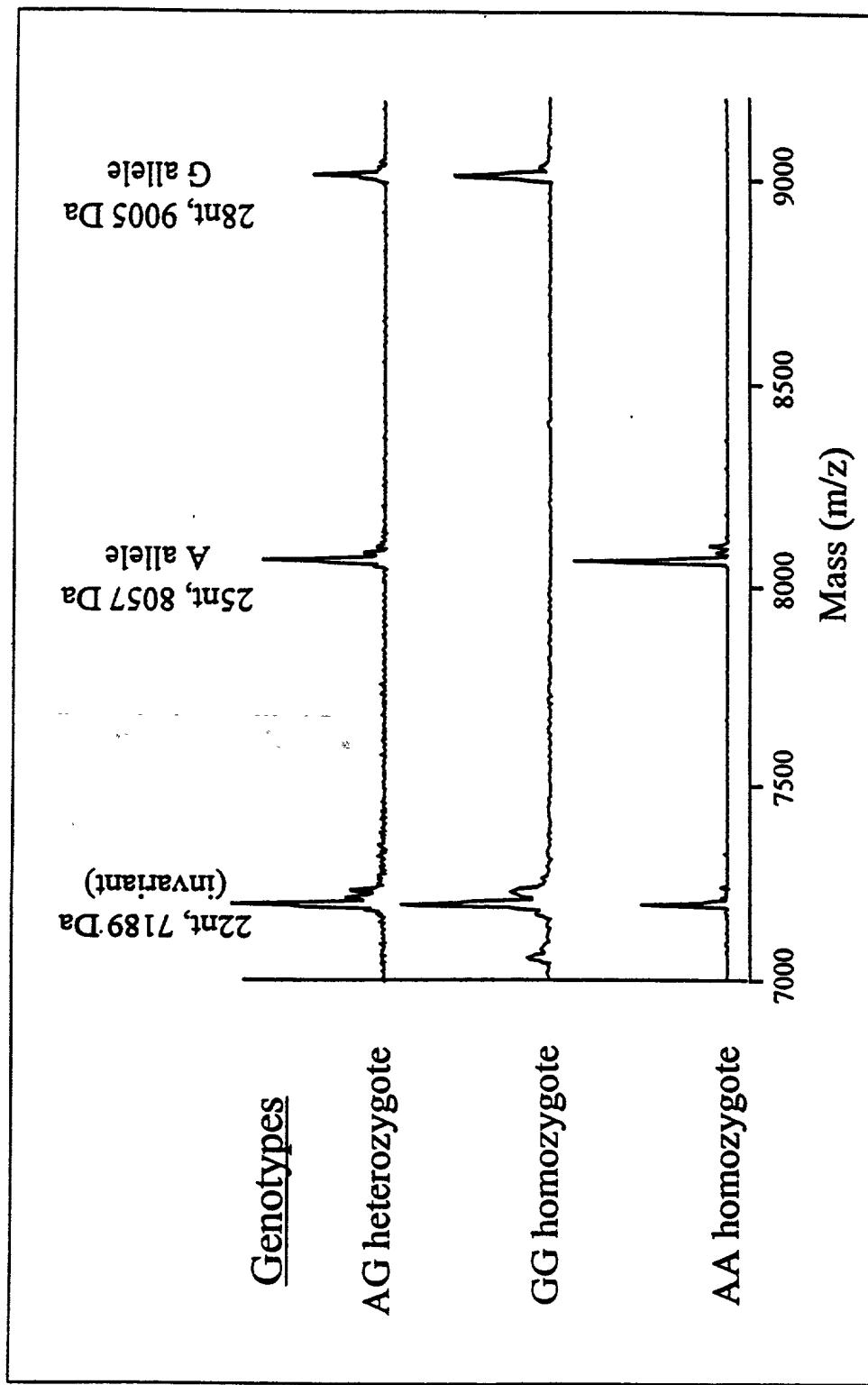
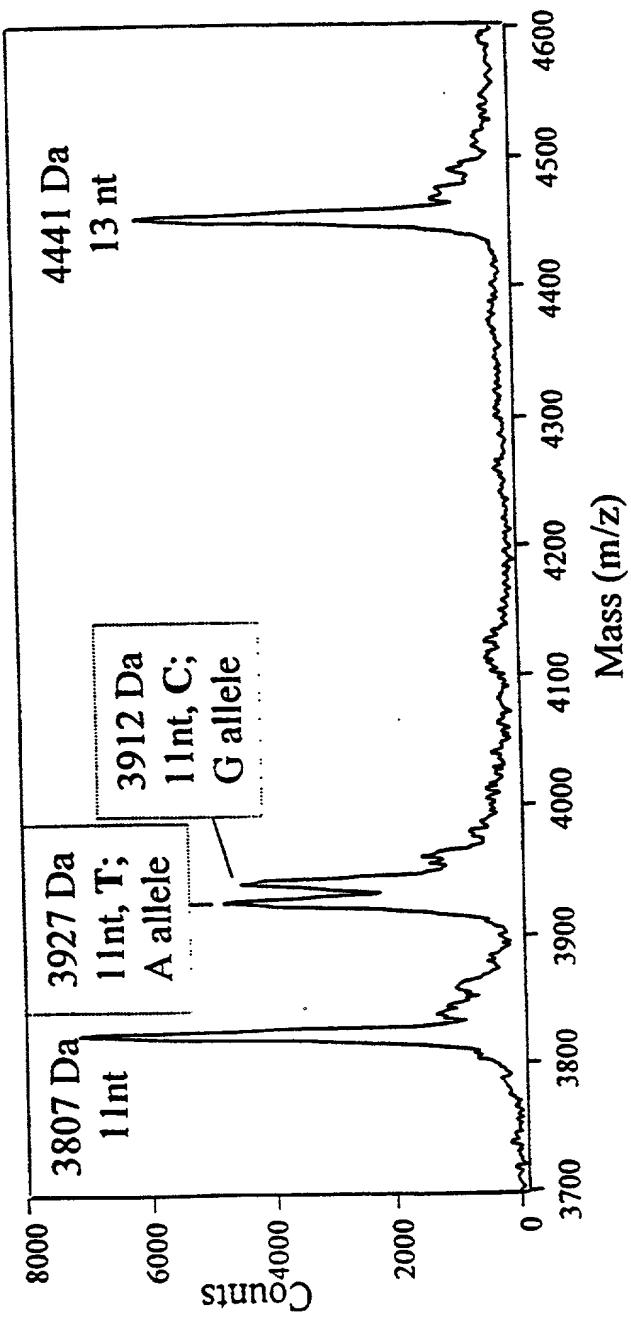
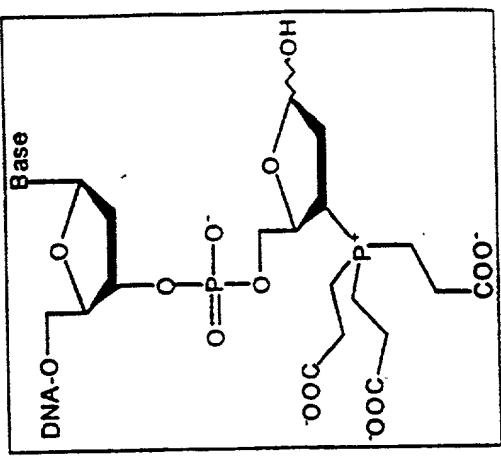


Figure 10. Genotyping by mass spectrometry: detection of mass differences

(a) MALDI-TOF analysis of heterozygote sample:
chemically restricted internal fragments provide confirmation



Mass spectrum of a heterozygote sample in the region
of 3700-4600 daltons



(b) Proposed structure
of the cleavage product

Fig. 11

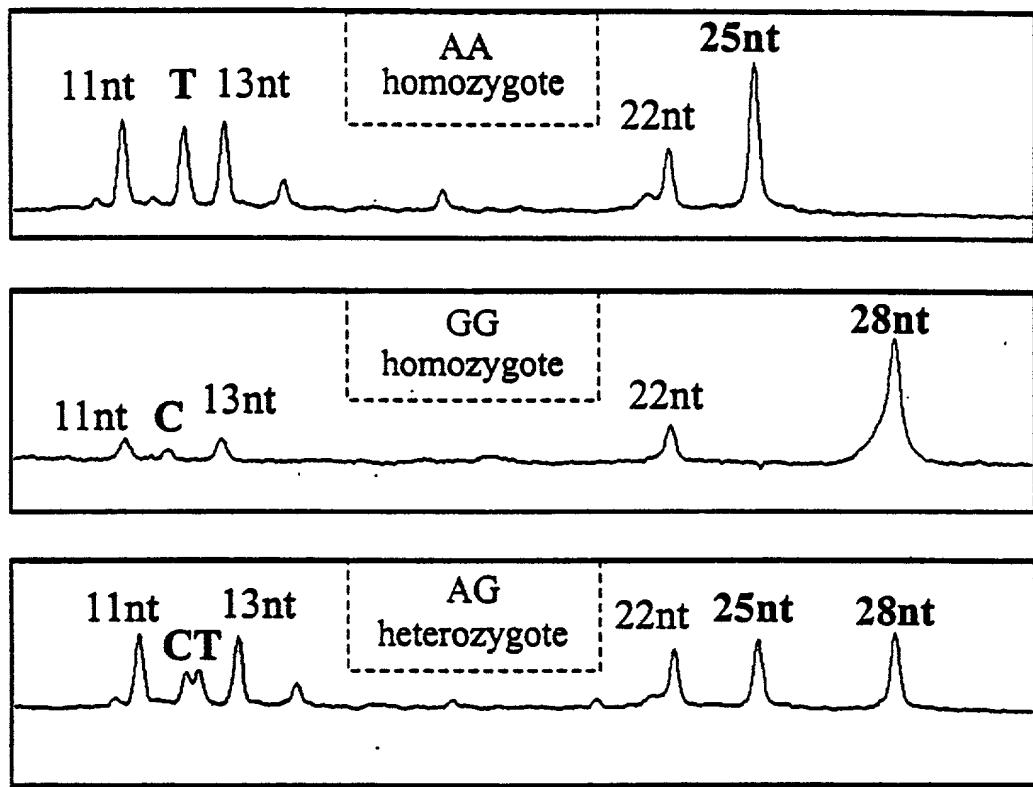


Fig. 12

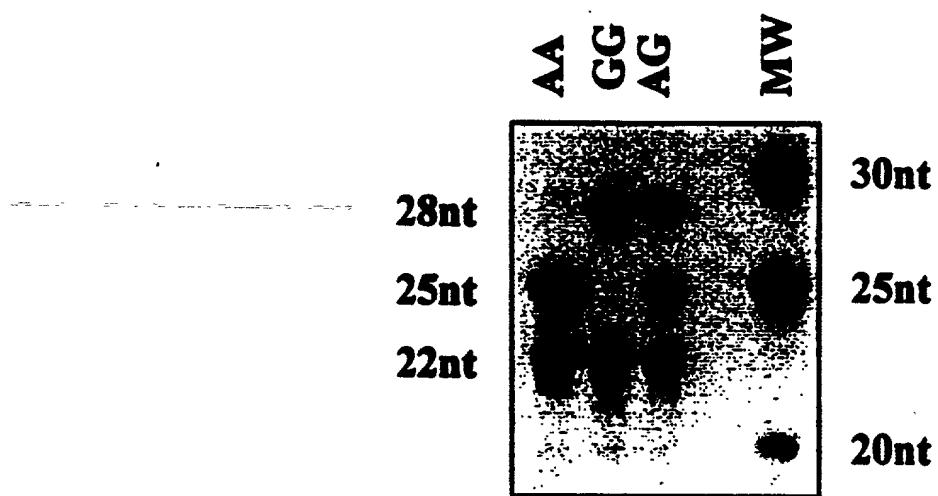


Fig. 13

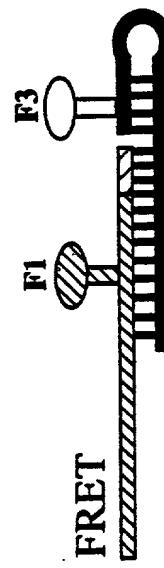
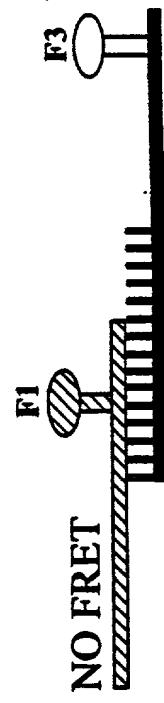
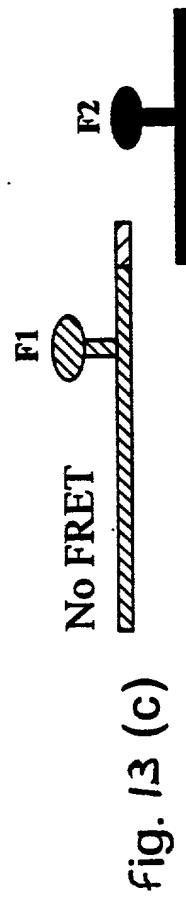
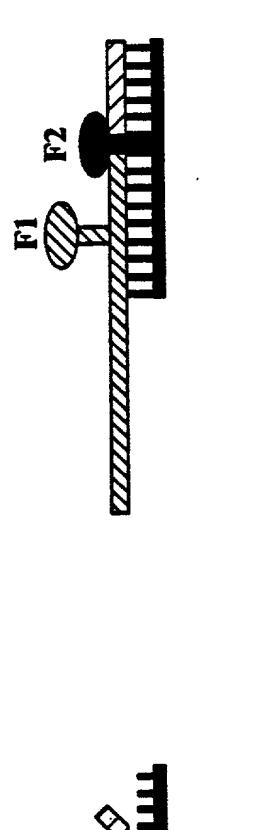
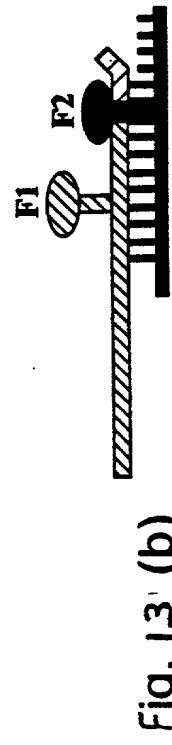
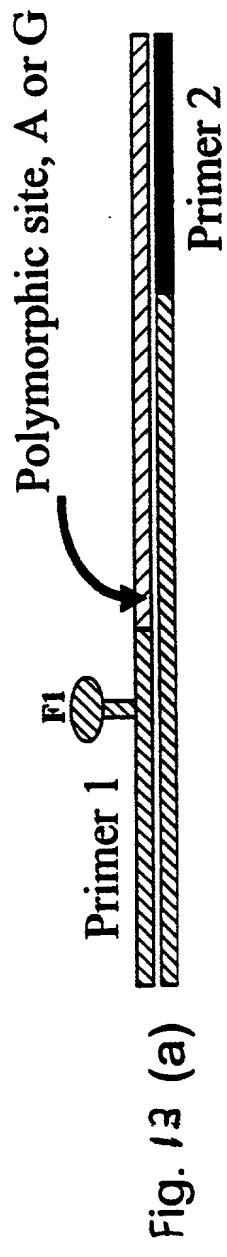


Fig. 13 (d)